Application No. 10/653,222 Docket No.: M4065.0735/P735
Date of Response: February 14, 2008

AMENDMENTS TO THE CLAIMS

Claims 1-20. (Canceled)

21. (Currently amended)) A light detecting system An imager device, comprising:

an imager device, comprising:

a substrate having a plurality of photosensitive regions; and

a substantially planar microlens array formed over the plurality of photosensitive regions; the microlens array comprising:[[;]]

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over substantially planar surfaces formed between the concave recesses of the first light conductor, an upper surface of the second light conductor being substantially planar, and having a top surface of the imager device.[[;]]

wherein a topmost portion of a topmost light conducting structure in the imager device is substantially planar.

Claims 22-26. (Canceled)

27. (Currently amended) An integrated imaging eircuit device comprising:

an imager device, comprising:

a substrate having a plurality of photosensitive regions; a microlens array formed over the plurality of photosensitive regions; the microlens array comprising:[[;]]

Application No. 10/653,222 Docket No.: M4065.0735/P735

Date of Response: February 14, 2008

a first light conductor having a plurality of concave recesses, [[and]]

a second light conductor within each recess and over the first light conductor, the second light conductor being coextensive with an adjacent second light conductor in at least a first plane and having a substantially planar surface, the second light conductor being the top surface of the imaging device; and[[,]]

wherein a topmost portion of a topmost light conducting structure in the imager device is substantially planar; and

readout circuitry coupled to the plurality of photosensitive regions.

Claims 28-46. (Canceled)

- 47. (Currently amended) The light detecting system imager device of claim 21, wherein the first light conductor has a first index of refraction and the second light conductor has a second index of refraction that is different from the first index of refraction.
- 48. (Currently amended) The light detecting system imager device of claim 47, wherein the first index of refraction is less than the second index of refraction.
- 49. (Currently amended) The light detecting system imager device of claim 21, wherein at least one of the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.
 - 50. (Canceled)
- 51. (Currently amended) The light detecting system imager device of claim 21, further comprising a color filter formed below the first light conductor.
 - 52. (Currently amended) A system, comprising: an An imager device, comprising:

Application No. 10/653,222 Docket No.: M4065.0735/P735

Date of Response: February 14, 2008

a substrate having a plurality of photosensitive regions; and

a microlens array formed over the plurality of photosensitive regions, the microlens array comprising:

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over substantially planar surfaces formed between the concave recesses of the light conductor, the second light conductor being the top surface of the imager device, and wherein a portion of said second light conductor over said planar surface of said first light conductor has a thickness approximately equal to $\lambda/2$ * N, wherein λ refers to a particular wavelength of light entering the microlens, and N refers to an index of refraction associated with the second light conductor.

- 53. (Currently amended) The integrated imaging eircuit device of claim 27, wherein the first light conductor has a first index of refraction and the second light conductor has a second index of refraction that is different from the first index of refraction.
- 54. (Currently amended) The integrated imaging eircuit device of claim 53, wherein the first index of refraction is less than the second index of refraction.
- 55. (Currently amended) The integrated imaging eircuit device of claim 27, wherein at least one of the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.
- 56. (Currently amended) The system <u>imager device</u> of claim 52, wherein the first light conductor has a first index of refraction and the second light conductor has a second index of refraction that is different from the first index of refraction.

Application No. 10/653,222 Docket No.: M4065.0735/P735

Date of Response: February 14, 2008

57. (Currently amended) The system imager device of claim 52, wherein the first index of refraction is less than the second index of refraction.

58. (Currently amended) The system imager device of claim 52, wherein at least one of the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.